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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/552,766	04/19/2000	Paul Evans	27950-410	2829
27902	7590	05/17/2004	EXAMINER	
ERICSSON RESEARCH CANADA 8400 DECARIE BLVD. MONTREAL, QC H4P 2N2 CANADA			LEE, TIMOTHY L	
			ART UNIT	PAPER NUMBER
			2662	
DATE MAILED: 05/17/2004				

11

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/552,766

Applicant(s)

EVANS, PAUL

Examiner

Timothy Lee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 7 and 10-15 is/are rejected.
- 7) ☒ Claim(s) 5-7 and 9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1 and 8 are rejected under 35 U.S.C. 102(e) as being anticipated by Mademann (US 6,081,723).

3. Regarding claims 1 and 8, Mademann discloses a method and arrangement for the location area management in a cellular network. Location areas are one or more radio cells combined together into an area in a network such as GSM. In a GPRS system, locations areas are also known as routing areas RA (routing area-cell mapping information defining a relation between a RA and at least one cell of the RBS). See col. 1, lines 49-59. Fig. 2 is directed toward the transmission of a radio call message (paging) into one or more radio cells of a location area for an incoming call. The mobile switching center MSC in Fig. 2 initiates the transmission of a paging PA. The paging PA is then sent from the MSC to the SGSN. A temporary mobile radiotelephone subscriber identifier TMSI and the international mobile radiotelephone subscriber identifier IMSI are co-transmitted in the paging PA. The paging PA is then sent from the SGSN to the base station BSS (for processing a page request received from e a SGSN). This paging PA contains one of more lists CLI of radio cell identifiers for the purpose of identification of the radio cells to which the TMSI and the IMSI are communicated (associated an RA information

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extracted from said page request with cell identification information using said routing area-cell mapping information). In order to process the page requests, it is inherent that the BSS contains a controller for extracting the information found in the paging PA (a PCU for processing a page request). Via the BSS, the paging PA proceeds to the mobile radiotelephone subscriber stations MS whereof the MS react to the TMSI. See col. 6, line 24-col. 7, line 33.

4. Regarding claim 8 more specifically, GPRS stands for General Packet Radio Service and is a network capable of being IP-based (IP-based RAN).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2, 3, 4, 10, 11, 12, 13, 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mademann in view of Hall et al. (US 6,438,383) and in light of the rejection to claim 1.

7. Regarding claims 2-4, 11, 12, 13, and 15, Mademann does not expressly disclose where the page message is a broadcast or multicast message. Hall et al. discloses sending a paging request over multiple channels or all channels depending on the network situation. See at least col. 9, lines 5-27. It would have been obvious to a person of ordinary skill in the art at the time of the invention send the paging messages of Mademann in the broadcast or multicast way described in Hall et al. One would have been motivated to do this because sometimes that

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mobile station cannot be found on the first paging attempt, so to increase the chances of finding the mobile station, it might be necessary to send it to more or all of the potential areas that the station could be in.

8. Regarding claim 10, Mademann does not expressly disclose a memory for storing the routing information, but it would have been obvious to a person of ordinary skill in the art at the time of the invention to include a memory for storing the routing area information. One would have been motivated to do this because that information would have been stored somewhere in the BSS so that it could determine where to forward the page after it received it from the SGSN.

9. Regarding claim 14, it is inherent the page message would have been decapsulated in order to extract the information found in the packet. This is a necessary step for reading the information found in a packet message.

Allowable Subject Matter

10. Claims 5-7 and 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

11. Applicant's arguments filed March 2, 2004 have been fully considered but they are not persuasive.

12. In response to Applicant's argument that is silent on mapping information, a base station mechanism for associating routing area information extracted from the page request, and any

other technique for sending a page request to a base station, the Examiner respectfully disagrees. As mentioned in the rejection, a paging message is sent from the SGSN to the base station, so Mademann is not silent on any technique for sending a page request to a base station. As also mentioned in the rejection, the SGSN determines the real RA location area of the mobile subscriber and replaces the SG-LAC in the paging with the real location information RA'. The purpose of this piece of information is so that the paging can be eventually sent through the base station to the correct radio cell. It is inherent that the base station contains some sort of mechanism that can translate this routing area information into radio cell information so that the paging PA can be sent to the correct radio cell, so Mademann is not silent on routing area-cell mapping information and a base station having a mechanism to perform this mapping. Because Mademann discloses all of these elements, the rejection is proper.

Conclusion

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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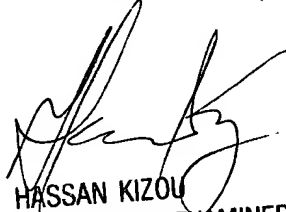
however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy Lee whose telephone number is (703)305-7349. The examiner can normally be reached on M-F, 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (703)305-4744. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TLL
Timothy Lee
May 12, 2004


HASSAN KIZOU
SUPERVISORY PATENT EXAMINER
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